SITUATION REPORT NO. 2 INCIDENT NO. 2001- 005

DATE: March 22, 2001 TIME: 9:00 a.m.

TO: Governor John Hoeven State Capitol Bismarck, N.D. 58505

- 1. NATURE OF DISASTER: Spring Flood Potential -- Above normal fall precipitation and a high soil moisture content, compounded by eight years of prior flooding, have resulted in a strong probability for Devils Lake to continue its historic rise. Forecasters expect the Red River of the North to rise several feet above flood stage at gauging locations. Additionally, hydrologists for the National Weather Service (NWS) expect moderate to major spring flooding to occur in the Souris River Basin, and along the Pembina River.
- 2. <u>DEATHS AND INJURIES</u>: No deaths or injuries have been reported.
- 3. DAMAGES: The Long-Range Probabilistic Outlook, issued March 20 by the Grand Forks Office of the National Weather Service (NWS), indicates that major flooding could occur in the city of Wahpeton if the Red River of the North reaches its 50 percent predicted crest level of 17.5 feet. At that level, the city's permanent dike requires reinforcement. River. Flood stage in Wahpeton is 10 feet; major flood stage is 14 feet. The NWS reported that the Ottertail River, which flows into the Red River near Wahpeton, is open and flowing. The Bois de Sioux, which becomes the Red River south of Wahpeton, is partly open and beginning to flow. Ice break-up has not begun on the Red, according to Weather Service officials. Based on current information, the Wahpeton crest could occur in early April. Downstream in Fargo, where flood stage is 17 feet, there is a 50 percent chance that the river will rise to 34 feet. Site information provided by the NWS indicates that major flooding occurs in Fargo at river levels above 32 feet. Preliminary data indicates that crest could occur in mid-April. Further downstream in Grand Forks, hydrologists place the 50 percent predicted crest level at 43.8 feet; flood stage is 28 feet. Moderate flooding could take place with water flowing over low-lying agricultural land and roads located near the river. Major flooding in the Grand Forks area occurs when the river reaches levels above 46 feet. When the river rises to 39 feet with a forecasted crest of 42 feet or higher, the Grand Forks Emergency Operations Center (EOC) expands its operation to 24 hours a day. A Warning Level 3, an urgent warning that a large flood is taking place, is issued when the river rises above 42 feet. In Drayton, there is a 50 percent chance that the river will rise above 39.4 feet, less than one-foot below the level where major flooding takes place. Flood stage at Drayton is 32 feet. At Pembina, where flood stage is 32 feet, the 50 percent predicted crest level is 49.5 feet. Moderate flooding takes place above 47 feet.

The latest outlook for Devils Lake places the predicted 50 percent crest level at Creel Bay at 1,448.3 feet, nearly one foot lower than indicated in an earlier outlook. NWS officials indicate that the change reflects better resolution in data and modeling as the forecasting period more closely approaches early July, when the crest is expected to take place. The new forecast also reflects the fact that precipitation levels have been one-half to one inch below normal since January. At a level of 1,448.3 feet, the lake will be slightly more than one foot above its record high level of 1,447.28 feet, set in 1999. All forecasted levels indicate that the lake will peak above its historic high.

Based on the NWS's revised 50 percent prediction for Devils Lake, engineers for the State Water Commission estimate that approximately 15,000 additional acres around Devils Lake would be inundated. Approximately 65,000 acre feet of water would flow from Devils Lake to Stump Lake, causing Stump Lake to rise approximately eight feet to 1,418 feet. An estimated 900 additional acres around Stump Lake would be covered by floodwaters. This estimate does not take into account local inflow into Stump Lake; it only estimates the flow from Devils Lake based on the predicted peak of 1,448.3 feet and assumes the roads across the channel between Devils Lake and Stump Lake do not cause significant head loss.

The Long-Range Probabilistic Outlook for Pembina River places the 50 percent prediction level at 22.6 feet in Neche, only 0.4 feet below the major flood level. At river levels above 20 feet, floodwaters will flow over N.D. Highway 18 and overtop the railroad upstream of the river gauge. The city of Neche is at risk of flooding on the south side.

The Bismarck Office issued a flood warning for Apple Creek River Basin in Burleigh County. The creek rose to 14.5 feet this morning; flood stage is 15 feet. Hydrologists expect the creek to crest below flood stage.

A flood warning remains in effect for the lower Souris River Basin, where minor to moderate flooding is occurring. The river and its tributaries have been slowly rising from snowmelt runoff. The river near Towner measured 54.1 feet on March 21 and is expected to crest at 55.5 feet by March 26-27. Flood stage is 52 feet. Sites downstream of Towner are also expected to rise above flood stage this week. At Bantry, the river will crest at 13.5 feet by March 29-30. This morning, the river measured 10.3 feet, 0.7 feet below its flood stage. At Westhope, the river remains ice covered. The river measured 7.6 feet this morning; flood stage is 10 feet. A slow rise is expected to continue. Only one upstream site, Foxholm, will rise above flood stage. The river at this location is expected to crest four feet above its 10-foot flood stage. The level measured 11.9 feet this morning. Levels are also expected to increase at other upstream locations, but upstream reservoir levels will determine the timing of crests. Forecasts call for a tributary, the Wintering River, to rise one to two feet above its six-foot flood stage near Karlsruhe by March 24. The river level near Karlsruhe measured 6.7 feet this morning.

In McHenry County, overland flooding has nearly surrounded a home in the city of Upham. Volunteers helped sandbag around the house.

In neighboring Pierce County, three roads have been inundated by runoff in areas where significant amounts of rain fell before freeze-up last fall.

Ward County officials expect minor to moderate flooding could occur along the Souris and Des Lacs Rivers. Because of deep snowpack, some secondary roads and isolated areas are at risk of inundation along the Des Lacs River.

In Eddy County, high ground water tables continue to cause problems for homeowners in the New Rockford area. One homeowner reported structural damage to her home and septic system. Another resident is experiencing sewer-related problems. As spring thaw takes place, road crews for the city of New Rockford have noted damages to roadways and are conducting an assessment.

Earlier this month, the NWS issued a flood warning for the Cannonball River. Law enforcement officials and NWS observers reported that frozen and plugged culverts were creating areas of backwater in some areas. The river flowed onto low-lying areas and pastureland.

Earlier this month, the Stark County Emergency Manager reported that waters from the Heart River were flowing over a road in southeast Dickinson. Floodwaters had also reached the picnic table area at an area campground. Patterson Lake has risen 4.5 feet since March 6 and was flowing over its spillway at 1,200 cubic feet per second (cfs). However, officials do not anticipate problems because the spillway can handle as much as 3,000 cfs.

4. RESOURCES:

<u>LOCAL</u>: Local agencies monitoring the spring flood potential include: public works departments, law enforcement agencies, communications centers, emergency management offices, fire and rescue, ambulance services, city and county commissions, administrative offices and planning councils.

STATE: Appropriate state agencies are also monitoring conditions.

<u>FEDERAL</u>: The National Weather Service, U.S. Army Corps of Engineers and the Federal Emergency Management Agency (FEMA) are also monitoring conditions.

- 5. <u>VOLUNTEER ACTION</u>: In McHenry County, the Salvation Army and American Red Cross are prepared to assist residents who are coping with flood-related problems.
- 6. <u>MAJOR ACTIONS</u>: On behalf of the city of Wahpeton, Governor Hoeven has requested assistance from the U.S. Army Corps of Engineers (COE) for construction activities and material supply for other protective actions.

The city of Wahpeton has issued an emergency declaration based on the potential for flooding. As part of their flood fight preparations, Wahpeton officials intend to acquire sufficient pumps and generators to assure continue operations of the sanitary system. City crews have installed electrical connection systems to accommodate the addition of generators at each of the 10 lift stations.

State officials have requested technical assistance from the COE for the cities of Pembina, Bathgate, Neche and Drayton in Pembina County.

In Pembina County, the emergency manager has requested that all cities appoint flood and volunteer coordinators and conduct inventories of flood-fight resources. The emergency manager held a flood preparedness meeting March 20 with all functional coordinators, county commission and water board members, city officials and township officers. Representatives of the NWS reviewed the current Long-Range Probablistic Outlook for the Red River, and the State Water Commission discussed the affects on the potential for flooding since the removal of unpermitted rural dikes along Pembina River. The emergency manager also issued a news release promoting the National Flood Insurance Program (NFIP).

Officials for the city of Grand Forks and Grand Forks County have issued emergency declarations. A flood organizational meeting was held March 21; participants represented city engineering, public works, fire, public information and finance. A second meeting has been scheduled for March 27. The city has issued 8,000 sandbags to the Public Works Department; the city sandbag policy was also reviewed and updated. The emergency manager is meeting with city department heads to review 2001 Flood Fight and EOC activation policies and procedures.

- 7. <u>ASSISTANCE NEEDED</u>: With the exception of ongoing technical assistance, no additional requests have been received.
- 8. OUTSIDE HELP ON SCENE: No additional resources are on scene at this time.
- 9. <u>OTHER</u>: Situation Reports published by North Dakota Emergency Management are posted on the Division's Internet home page. The address is http://www.state.nd.us/dem.

Douglas C. Friez, State Director